



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

All Power Reactor Licensees and Holders of  
Construction Permits in Active or Deferred Status  
on the Enclosed List

SUBJECT: SCREENING AND PRIORITIZATION RESULTS REGARDING INFORMATION  
PURSUANT TO TITLE 10 OF THE *CODE OF FEDERAL REGULATIONS*  
50.54(f) REGARDING SEISMIC HAZARD RE-EVALUATIONS FOR  
RECOMMENDATION 2.1 OF THE NEAR-TERM TASK FORCE REVIEW  
OF INSIGHTS FROM THE FUKUSHIMA DAI-ICHI ACCIDENT

On March 12, 2012, the U.S. Nuclear Regulatory Commission (NRC) issued a request for information pursuant to Title 10 of the *Code of Federal Regulations*, Part 50 (10 CFR), Section 50.54(f) (hereafter referred to as the 50.54 (f) letter) (Agencywide Document Access and Management System (ADAMS) Accession No. ML12053A340). The purpose of that request was to gather information concerning, in part, the seismic hazards at operating reactor sites and to enable the NRC staff to determine whether licenses should be modified, suspended, or revoked. The "Required Response" section of Enclosure 1 indicated that licensees and construction permit holders should provide a Seismic Hazard Evaluation and Screening report within 1.5 years from the date of the letter for central and eastern United States (CEUS) nuclear power plants, and within 3 years for western United States (WUS) plants. For CEUS plants, the date to submit the report was extended to March 31, 2014, by NRC letter dated May 7, 2013.<sup>1</sup> Further, the 50.54(f) letter stated that NRC would provide the results of the screening and prioritization indicating deadlines for individual plants to complete seismic risk evaluations to assess the total plant response to the re-evaluated seismic hazard. Additionally, by letter<sup>2</sup> dated February 20, 2014, the NRC provided supplemental information on the content of the seismic re-evaluated hazard submittals including guidance on reportability and operability. The purpose of this letter is to inform licensees of the NRC's screening and prioritization and to allow licensees to appropriately plan the completion of further seismic risk evaluations described in Enclosure 1 of the 50.54(f) letter.

To respond to the 50.54(f) letter, all addressees committed to follow the Electric Power Research Institute (EPRI) Report, "Seismic Evaluation Guidance: Screening, Prioritization and Implementation Details (SPID) for the Resolution of Fukushima Near-Term Task Force Recommendation 2.1: Seismic,"<sup>3</sup> as supplemented by the EPRI Report, "Seismic Evaluation Guidance: Augmented Approach for the Resolution of Fukushima Near-Term Task Force (NTTF) Recommendation 2.1: Seismic"<sup>4</sup> (referred to as the Expedited Approach). The NRC held multiple public meetings and teleconferences with industry and the public leading to the development of the guidance documents supporting review of re-evaluated seismic hazards.

<sup>1</sup> The May 7, 2013, endorsement letter is available in ADAMS under Accession No. ML13106A331.

<sup>2</sup> The February 20, 2014, supplemental information letter is available in ADAMS under Accession No. ML14030A046

<sup>3</sup> The SPID guidance document is found in ADAMS under Accession No. ML12333A170. The staff endorsement letter for the SPID guidance is found in ADAMS under Accession No. ML12319A074.

<sup>4</sup> The Expedited Approach guidance document is found in ADAMS under Accession No. ML13102A142.

Licensees submitted the re-evaluated seismic hazards or letter of intent to provide the hazard for their sites by letters dated March 2014 (references are provided in Enclosure 3 of this letter). The NRC staff conducted the screening and prioritization review of the submittals by assessing each licensee's screening evaluation and hazard analysis utilizing the endorsed SPID guidance.

#### INTERIM EVALUATIONS<sup>5</sup>

The 50.54(f) letter requested that licensees provide "interim evaluations and actions taken or planned to address the higher seismic hazard relative to the design basis, as appropriate, prior to completion of the risk evaluation." For those plants where the re-evaluated seismic hazard exceeds the seismic design basis, licensees stated they will provide interim evaluations to demonstrate that the plant can cope with the higher re-evaluated seismic hazard while the longer term seismic risk evaluations are ongoing. In support of licensee interim evaluations, the Nuclear Energy Institute (NEI) by letter<sup>6</sup> dated March 12, 2014, provided an EPRI study that estimated fleetwide seismic risk and provided a discussion of the inherent seismic design margins for structures, systems, and components (SSCs).

The March 12, 2014, EPRI fleetwide study calculated seismic risk following the approach the NRC staff used in 2010 for the Safety/Risk Assessment conducted as part of Generic Issue (GI)-199, "Implications of Updated Probabilistic Seismic Hazard Estimates in Central and Eastern United States on Existing Plants"<sup>7</sup>. The EPRI study concluded that "site-specific seismic hazards show that there [...] has not been an overall increase in seismic risk for the fleet of U.S. plants" based on the re-evaluated seismic hazards. As such, the "current seismic design of operating reactors continues to provide a safety margin to withstand potential earthquakes exceeding the seismic design basis." Lastly, the March 12, 2014, NEI letter provided "Perspectives on the Seismic Capacity of Operating Plants," which (1) assessed a number of qualitative reasons why the design of SSCs inherently contain margin beyond their design level, (2) discussed industrial seismic experience databases of performance of industry facility components similar to nuclear SSCs, and (3) discussed earthquake experience at operating plants.

In their March 2014 submittals, licensees confirmed that the conclusions of the EPRI fleetwide study apply to their plants. The submittals also discussed completing plant seismic walkdowns as part of NTTF Recommendation 2.3 in order to verify that the current plant configuration is consistent with the licensing basis. In addition, licensees described any insights gained from previous seismic evaluations.

To assess each licensee's interim evaluations, the NRC staff reviewed the fleetwide study as well as each licensee's plant-specific discussion. The results of the staff's independent review confirm that fleetwide seismic risk estimates are consistent with the approach and results used in the GI-199 safety/risk assessment. As a result, the staff has confirmed that the conclusions reached in GI-199 safety/risk assessment remain valid and that the plants can continue to operate while additional evaluations are conducted.

---

<sup>5</sup> Enclosure 1 of this letter provides a Glossary of Seismic Evaluations

<sup>6</sup> Industry-issued letter on seismic risk evaluations for plants in the Central and Eastern United States is available in ADAMS under Accession No. ML14083A596.

<sup>7</sup> Results of Safety/Risk Assessment of GI-199 is available in ADAMS under Accession No. ML100270582.

The interim evaluation is a first step in the near-term assessment of the plant's capacity to withstand the re-evaluated hazard. Also in the near-term, by December 2014, plants with a higher re-evaluated hazard will complete an "Expedited Approach" to evaluate and identify reinforcements, if necessary, for certain equipment to ensure a safe shutdown pathway can withstand the higher seismic ground motion.

### SCREENING PROCESS

As defined in the 50.54(f) letter and the SPID guidance, the seismic hazard re-evaluations were conducted using current analysis methods and guidance. The licensees' responses to the 50.54(f) letter provided seismic hazard re-evaluation results, which were the focus of the NRC staff's initial screening and prioritization review.

Although the safe shutdown earthquake (SSE) is commonly referred to as a single number, this number represents a distribution of ground motions that occur over a range of spectral frequencies. This results in a curve of ground acceleration over frequency. The ability of equipment and structures in the plant to withstand the effects of ground motions is frequency specific. For the purposes of the licensees' analyses and NRC staff's review, the SPID guidance identifies three frequency ranges that are of particular interest: 1–10 Hz, a low frequency range of <2.5 Hz, and a high frequency range of >10 Hz. The different ranges have been identified due to the different types of structures and equipment that may be impacted by ground motions in that range. For example, large components generally are not affected significantly by high frequencies (i.e., >10 Hz). The frequency range 1–10 Hz is the focus for this portion of the risk evaluation, as this range has the greatest potential effect on the performance of equipment and structures important to safety. For other frequency ranges, discussed below, limited-scope evaluations will be conducted, when appropriate.

In accordance with the SPID and Expedited Approach guidance, the re-evaluated seismic hazard determines if additional seismic risk evaluations are warranted for a plant. Specifically, the re-evaluated ground motion response spectra (GMRS) in the 1–10 Hz frequency range is compared to the existing SSE:

- If the re-evaluated GMRS, in the 1–10 Hz range, is less than the plant's existing SSE, then the plant screens out of conducting further seismic risk evaluations.
- If the GMRS, in the 1–10 Hz range, is greater than the existing SSE, then the plant will complete the Expedited Approach (including the Interim Evaluation). Most plants that meet this criterion also screen in to conduct a seismic risk evaluation and have committed to conduct high frequency and spent fuel pool evaluations.
- The SPID guidance provides criteria for a plant with a GMRS above the SSE, but bounded by the Individual Plant Examination for External Events (IPEEE) capacity spectrum. To use the IPEEE capacity spectrum to screen out of conducting a seismic risk evaluation, the licensee needed to demonstrate the adequacy of the plant's IPEEE evaluation by meeting the criteria in the SPID. If the IPEEE capacity is greater than the GMRS in the 1–10 Hz range, the plant screens out of conducting a seismic risk

evaluation. However, these plants have committed to evaluate the spent fuel pool at the re-evaluated hazard level, as spent fuel pools were not analyzed in the IPEEE program.

In addition, if the GMRS meets the low hazard threshold, which is described in the SPID, and only exceeds the SSE below 2.5 Hz, the licensee will perform a limited evaluation of equipment potentially susceptible to low frequency motions. Similarly, if the GMRS exceeds the SSE only above 10 Hz, then the licensee will perform an evaluation of the equipment or structures susceptible to that specific range of ground motion.

Enclosure 2 provides the staff's determination of priority for plants that screen in to conduct a seismic risk evaluation, and identification of plants to complete limited-scope evaluations (i.e., spent fuel pool, high frequency, or low frequency). Additionally, the enclosure identifies plants that screen out of any further evaluations.

### CONDITIONAL SCREENING

As discussed in public meetings<sup>8</sup> and a February 20, 2014 letter, the staff anticipated the possibility of not being able to complete the determination for conducting a seismic risk evaluation for some plants in the 30-day review period under certain circumstances. For example, if a licensee provided a unique submittal or deviated from the SPID guidance, additional time for the review might be needed. For other submittals, the staff's independent GMRS assessment could differ from the GMRS provided in the March 2014 submittals, and these differences need to be better understood before determining if a plant would screen out from further evaluation. Accordingly, during the NRC screening and prioritization process, the staff did identify some plants for which a determination could not be made and interactions with the licensees are needed to reach resolution. The staff determined these plants are "conditionally screened-in" for the purposes of prioritizing and conducting additional evaluations.

Plants identified as "conditional screen-in" should submit the Expedited Approach by December 31, 2014 and, until a final determination is made, conduct a seismic risk evaluation as prioritized in Enclosure 2. Those plants identified as "conditional screen-in," which based on their screening assessment, did not submit an interim evaluation in the March 2014 submittal, should complete the interim evaluations, identify any associated actions, and submit the results to the NRC by no later than June 6, 2014.

For plants identified as "conditional screen-in", after interactions with licensees have occurred, the staff will make a final screening and prioritization determination and provide a letter to each impacted licensee. If the plant remains screened in, the final screening letter also will affirm or update the plant priority for further evaluations. If the plant screens out, the final screening letter also will determine if the plant needs to complete limited-scope evaluations (i.e., spent fuel pool, high frequency, or low frequency).

---

<sup>8</sup> Discussion as part of public meetings dated January 23, February 5, February 10, and March 25, 2014 (ADAMS Accession Nos. ML14028A062, ML14050A055, ML14050A084, and ML14091A102, respectively)

## PLANT PRIORITIZATION

The NRC grouped the “screened in” (including those conditionally screened in) plants into three groups, which (i) reflects the relative priority for conducting a seismic risk evaluation that compares each plant’s current capabilities to the re-evaluated seismic hazard, and (ii) accounts for the appropriate allocation of limited staff and available expertise for reviewing and conducting seismic risk evaluations. During the prioritization review, the staff considered each licensee’s re-evaluated hazard submittals, seismic risk insights from GI 199 “Implications of Updated Probabilistic Seismic Hazard Estimates in Central and Eastern United States on Existing Plants,” and the staff’s confirmatory analysis of the seismic hazard.

Enclosure 2 provides the plant prioritizations for completing the seismic risk evaluations. To prioritize the plants, staff examined certain key parameters such as (1) the maximum ratio of the new re-evaluated hazard (GMRS) to the SSE in the 1-10 Hz range; (2) the maximum ground motion in the 1-10 Hz range; and (3) insights from previous seismic risk evaluations. As such, Group 1 plants are generally those that have the highest re-evaluated hazard relative to the original plant seismic design basis (GMRS to SSE) as well as ground motions in the 1-10 Hz range that are generally higher in absolute magnitude. Group 1 plants are expected to conduct a seismic risk evaluation and submit it by June 30, 2017. Group 2 plants are also expected to conduct a seismic risk evaluation, which should be submitted by December 31, 2019.

Enclosure 2 also provides a list of Group 3 plants. Group 3 plants have GMRS to SSE ratios that are greater than 1, but the amount of exceedance in the 1-10 Hz range is relatively small, and the maximum ground motion in the 1-10 Hz range is also not high. Given the limited level of exceedance of the Group 3 plants, staff is evaluating the need for licensees to conduct a seismic risk evaluation in order for the staff to complete its regulatory decision making. However, the staff has had insufficient review time with the recently submitted seismic hazard submittals to reach a conclusion. After further review of the seismic hazard re-evaluations and the Expedited Approach submittals, the staff will decide which Group 3 plants need to complete a risk evaluation. Risk evaluations for Group 3 plants are due by December 31, 2020.

## NEXT STEPS

For plants that screen in to conduct a risk evaluation, the licensees should finalize and submit each plant’s Expedited Approach no later than December 31, 2014. In accordance with the endorsed guidance, the staff acknowledges that the December 2014 Expedited Approach submittal will focus on plant equipment (i.e. safe shutdown pathway<sup>9</sup>) evaluations and modifications, as necessary, prior to submitting the plant seismic risk evaluations.

Additionally, the schedule milestones and content of limited-scope evaluations will require additional development and coordination with stakeholders. For example, for the high frequency evaluation, an industry study of the effects for sensitive equipment is currently in progress. Furthermore, recent assessments by the NRC staff and related decisions by the Commission may justify revisions to the existing guidance regarding the limited-scope evaluations of spent fuel pools at some sites. As needed, the NRC staff will initiate discussions

---

<sup>9</sup> Section 3 of the Expedited Approach guidance (ADAMS No. ML13102A142) provides a process to identify a single seismically robust success path using a subset of installed plant equipment, FLEX equipment and connection points.

with stakeholders in the near future as part of the development of any revised guidance documents. Given the generic nature of the limited-scope evaluations, it is expected that these evaluations will be completed for plants within the next two years.

This letter transmits the NRC staff's results of the seismic hazard submittals for the purposes of screening and prioritizing the plants. It does not convey the staff's final determination regarding the adequacy of any plant's calculated hazard. As such, the NRC staff will continue its review of the submitted seismic hazard re-evaluations, and may request additional plant-specific information to support this review. The staff has placed a high priority on this review for the early identification of issues that might adversely affect each licensee's seismic risk evaluations. Initial interactions with licensees will occur as soon as practicable. The NRC staff plans to issue a staff assessment on the re-evaluated seismic hazard once each review is completed in approximately 12 to 18 months.

If you have any questions on this matter, please contact your NRC licensing Project Manager.

Sincerely,

A handwritten signature in black ink, appearing to read "Eric J. Leeds", followed by the initials "E.J.L." in a cursive style.

Eric J. Leeds, Director  
Office of Nuclear Reactor Regulation

Enclosures:

1. Glossary of Evaluations
2. Screening and Prioritization Results
3. List of Licensee March 2014 Re-evaluated Seismic Hazard Submittals
4. List of Addressees

Letter to All Power Reactor Licensees and Holders of Construction Permits in  
Active or Deferred Status from Eric J. Leeds dated May X, 2014

SUBJECT: SCREENING AND PRIORITIZATION RESULTS OF REQUEST FOR  
INFORMATION PURSUANT TO TITLE 10 OF THE *CODE OF FEDERAL  
REGULATIONS* 50.54(f) REGARDING SEISMIC HAZARD RE-EVALUATIONS  
FOR RECOMMENDATION 2.1 OF THE NEAR-TERM TASK FORCE REVIEW OF  
INSIGHTS FROM THE FUKUSHIMA DAI-ICHI ACCIDENT

DISTRIBUTION:

PUBLIC

LPL1-1 R/F  
LPL1-2 R/F  
LPL2-1 R/F  
LPL2-2 R/F  
LPL3-1 R/F  
LPL3-2 R/F  
LPL4-1 R/F  
LPL4-2 R/F  
RidsNroOd  
RidsNrrDorl  
RidsNrrDorlLpl1-1  
RidsNrrDorlLpl1-2  
RidsNrrDorlLpl2-1  
RidsNrrDorlLpl2-2  
RidsNrrDorlLpl3-1  
RidsNrrDorlLpl3-2  
RidsNrrDorlLpl4-1  
RidsNrrDorlLpl4-2  
RidsNrrOd  
RidsNsirOd  
RidsOeMailCenter  
RidsOgcMailCenter  
LRegner, NRR  
MKhanna, NRR  
RPascarelli, NRR  
BBeasley, NRR  
JQuichocho, NRR  
TTate, NRR  
RCarlson, NRR  
MMarkley, NRR  
DBroadus, NRR  
NDiFrancesco, NRR  
MJardaneh, NRO  
RidsNrrLAABaxter  
RidsNrrLAJBurkhardt  
RidsNrrLABClayton  
RidsNrrLASFiguroa

RidsNrrLAKGoldstein  
RidsNrrLASRohrer  
RidsNrrLaSlent  
RidsNrrLAMHenderson  
RidsNrrPMANO  
RidsNrrPMBeaverValley  
RidsNrrPMBellefonte  
RidsNrrPMBraidwood  
RidsNrrPMBrownsFerry  
RidsNrrPMBrunswick  
RidsNrrPMBByron  
RidsNrrPMCalloway  
RidsNrrPMCalvertCliffs  
RidsNrrPMCatawba  
RidsNrrPMClinton  
RidsNrrPMComanchePeak  
RidsNrrPMCooper  
RidsNrrPMDCCook  
RidsNrrPMDavisBesse  
RidsNrrPMDresden  
RidsNrrPMDuaneArnold  
RidsNrrPMFarley  
RidsNrrPMFermi2  
RidsNrrPMFitzPatrick  
RidsNrrPMFortCalhoun  
RidsNrrPMGrandGulf  
RidsNrrPMHatch  
RidsNrrPMHopeCreek  
RidsNrrPMIndianPoint  
RidsNrrPMLaSalle  
RidsNrrPMLimerick  
RidsNrrPMMcGuire  
RidsNrrPMMillstone  
RidsNrrPMMonticello  
RidsNrrPMNineMile  
RidsNrrPMNorthAnna  
RidsNrrPMOcone  
RidsNrrPMOysterCreek

RidsNrrPMPalisades  
RidsNrrPM PeachBottom  
RidsNrrPMPerry  
RidsNrrPMPilgrim  
RidsNrrPMPointBeach  
RidsNrrPMPrairieIsland  
RidsNrrPMQuadCities  
RidsNrrPMREGinna  
RidsNrrPMRiverBend  
RidsNrrPMRobinson  
RidsNrrPMSalem  
RidsNrrPMSeabrook  
RidsNrrPMSequoyah  
RidsNrrPMShearonHarris  
RidsNrrPMSouthTexas  
RidsNrrPMStLucie  
RidsNrrPMSummer  
RidsNrrPMSurry  
RidsNrrPMSusquehanna  
RidsNrrPMThreeMileIsland  
RidsNrrPMTurkeyPoint  
RidsNrrPMVermontYankee  
RidsNrrPMVogle  
RidsNrrPMWaterford  
RidsNrrPMWattsBar1  
RidsNrrPMWattsBar2  
RidsNrrPMWolfCreek  
RidsOgcRp Resource  
RidsRgn1MailCenter  
Resource  
RidsRgn2MailCenter  
Resource  
RidsRgn3MailCenter  
Resource  
RidsRgn4MailCenter  
Resource  
RidsEdoMailCenter Resource

## Glossary of Evaluations

### Associated with Near-Term Task Force Recommendation 2.1 Seismic Hazard Re-evaluations

**Interim Evaluation or Actions** – An immediate licensee and NRC review of the re-evaluated hazard to determine whether actions are needed to assure plant safety while further evaluations are ongoing. The staff has completed its review and concluded that, based on the licensees' interim evaluations and actions, all central and eastern United States (CEUS) plants are safe for continued operations. Interim evaluations and actions are provided in Section 5.0, "Interim Actions," of the licensee submittals.

**Expedited Approach** – A near-term licensee evaluation to be completed by December 31, 2014, for CEUS plants whose re-evaluated hazard exceeds the current design basis for the safe shutdown earthquake hazard level. The evaluation looks at the systems and components that can be used to safely shut down a plant under the conditions of a station blackout (i.e., no alternating current power is available) and loss of ultimate heat sink. The expedited approach will either confirm that a plant has sufficient margin to continue with a longer-term evaluation without any modifications, or confirm the need to enhance the seismic capacity to assure they can withstand the re-evaluated hazard. The Expedited Approach guidance document is found in the Agencywide Documents Access and Management System under No. ML13102A142.

**Seismic Risk Evaluation** – Longer-term seismic risk evaluation provides the most comprehensive information to make regulatory decisions, such as whether to amend a plant's design or licensing basis or make additional safety enhancements. These evaluations provide information to make risk-informed decisions. The staff will use this information in conjunction with the existing regulatory tools, such as backfit analysis, to decide on further regulatory actions. The longer-term seismic risk evaluations could be either a Seismic Margins Analysis or a Seismic Probabilistic Risk Assessment, depending on the magnitude of the exceedance.

**Limited-Scope Evaluations** – These include i) Spent Fuel Pool Evaluation, ii) High Frequency Evaluation, and iii) Low Frequency Evaluation. Respectively, these evaluations are focused on the following: i) spent fuel pool components and systems capable of draining water inventory to the level of the spent fuel, ii) a review of components susceptible to high frequency accelerations (e.g. electrical relays), and iii) a review of components susceptible to low frequency accelerations (e.g. water storage tanks).

Near-Term Task Force Review of Insights from the Fukushima Dai-Ichi Accident

Seismic Risk Evaluations Screening and Prioritization Results for

Central and Eastern Reactor Sites

Plant Name	Screening Result	Expedited Approach Evaluation	Seismic Risk Evaluation (Prioritization Group)	Limited-scope Evaluations		
				High Frequency Evaluation	Low Frequency Evaluation	Spent Fuel Pool Evaluation
Callaway Plant, Unit 1	In	x	1	x		x
Donald C. Cook Nuclear Plant, Units 1 and 2	In	x	1	x		x
Indian Point Nuclear Generating Unit Nos. 2 and 3	In	x	1	x		x
North Anna Power Station, Units 1 and 2	In	x	1	x		x
Oconee Nuclear Station, Units 1, 2, and 3	In	x	1	x		x
Peach Bottom Atomic Power Station Units 2 and 3	In	x	1	x		x
Pilgrim Nuclear Power Station, Unit No. 1	In	x	1	x		x
H. B Robinson Steam Electric Plant, Unit No. 2	In	x	1	x		x
Vogtle Electric Generating Plant, Units 1 and 2	In	x	1	x		x
Watts Bar Nuclear Plant, Units 1 and 2	In	x	1	x		X
Beaver Valley Power Station, Units 1 and 2	In	x	2	x		x

Plant Name	Screening Result	Expedited Approach Evaluation	Seismic Risk Evaluation (Prioritization Group)	Limited-scope Evaluations		
				High Frequency Evaluation	Low Frequency Evaluation	Spent Fuel Pool Evaluation
Browns Ferry Nuclear Plant, Units 1, 2, and 3	In	x	2	x		x
Dresden Nuclear Power Station, Units 2 and 3	In	x	2	x		x
Fermi, Unit 2	In	x	2	x		x
Edwin I. Hatch Nuclear Plant, Units 1 and 2	In	x	2	x		x
LaSalle County Station, Units 1 and 2	In	x	2	x		x
Oyster Creek Nuclear Generating Station	Conditional In	x	2	x		x
Palisades Nuclear Plant	In	x	2	x		x
Virgil C. Summer Nuclear Station, Unit 1	In	x	2	x		x
Catawba Nuclear Station, Units 1 and 2	In	x	2	x		x
Sequoyah Nuclear Plant, Units 1 and 2	In	x	2	x		x
Arkansas Nuclear One, Units 1 and 2	Conditional In	x	3	x		x
Bellefonte Nuclear Plant, Units 1 and 2	In	x	3	x		x
Brunswick Steam Electric Plant, Units 1 and 2	Conditional In	x	3	x		x
Calvert Cliffs Nuclear Power Plant, Units 1 and 2	In	x	3	x		X
Clinton Power Station, Unit 1	Conditional In	x	3	x		x
Cooper Nuclear Station	Conditional In	x	3	x		x

Plant Name	Screening Result	Expedited Approach Evaluation	Seismic Risk Evaluation (Prioritization Group)	Limited-scope Evaluations		
				High Frequency Evaluation	Low Frequency Evaluation	Spent Fuel Pool Evaluation
Davis-Besse Nuclear Power Station, Unit 1	In	x	3	x		x
Duane Arnold Energy Center	Conditional In	x	3	x		x
James A. FitzPatrick Nuclear Power Plant	Conditional In	x	3	x		x
Fort Calhoun Station, Unit 1	Conditional In	x	3	x		x
Limerick Generating Station, Units 1 and 2	Conditional In	x	3	x		x
William B. McGuire Nuclear Station, Units 1 and 2	In	x	3	x		x
Millstone Power Station, Unit 2	Conditional In	x	3	x		x
Monticello Nuclear Generating Plant	Conditional In	x	3	x		x
Perry Nuclear Power Plant, Unit 1	In	x	3	x		x
Point Beach Nuclear Plant, Units 1 and 2	In	x	3	x		x
Quad Cities Nuclear Power Station, Units 1 and 2	Conditional In	x	3	x		x
Salem Nuclear Generating Station, Units 1 and 2	Conditional In	x	3	x		x
Seabrook, Unit 1	In	x	3	x		x
Surry Power Station, Unit Nos. 1 and 2	Conditional In	x	3	x		x
Three Mile Island Nuclear Station, Unit 1	In	x	3	x		x
Wolf Creek Generating Station, Unit 1	In	x	3	x		x

Plant Name	Screening Result	Expedited Approach Evaluation	Risk Evaluation (Prioritization Group)	Limited-scope Evaluations		
				High Frequency Evaluation	Low Frequency Evaluation	Spent Fuel Pool Evaluation
Vermont Yankee Nuclear Power Station	Conditional In	x	3	x		x
Braidwood Station, Units 1 and 2	Out			x		
Byron Station, Units 1 and 2	Out	x <sup>1</sup>		x		x
Comanche Peak Nuclear Power Plant, Units 1 and 2	Out					
Joseph M. Farley Nuclear Plant, Units 1 and 2	Out			x	x	
R.E. Ginna Nuclear Power Plant	Out			x		
Grand Gulf Nuclear Station, Unit 1	Out					
Shearon Harris Nuclear Power Plant, Unit 1	Out			x		
Hope Creek Generating Station	Out			x		
Millstone Power Station, Unit 3	Out	x <sup>1</sup>		x		x
Nine Mile Point Nuclear Station, Units 1 and 2	Out			x		
Prairie Island Nuclear Generating Plant, Units 1 and 2	Out			x		
River Bend Station	Out			x		
St. Lucie Plant, Units 1 and 2	Out					
South Texas Project, Units 1 and 2	Out					
Susquehanna Steam Electric Station, Units 1 and 2	Out	x <sup>1</sup>		x		
Turkey Point, Units 3 and 4	Out					
Waterford Steam Electric Station, Unit 3	Out			x		

<sup>1</sup> Re-evaluated hazard is greater than plant licensing basis safe shutdown earthquake. Licensee has demonstrated IPEEE plant capacity consistent with endorsed guidance bounds the re-evaluated hazard. Expedited approach evaluation will provide a demonstration of safe shutdown capability at a greater hazard level.

March 2014 Re-evaluated Seismic Hazard Submittals  
for Central and Eastern United States Reactor Sites

<b>Licensee Facility</b>	<b>Date of letter (ADAMS Accession Nos.)</b>
Arkansas Nuclear One, Units 1 and 2	March 28, 2014 (ML14092A021)
Beaver Valley Power Station, Units 1 and 2	March 31, 2014 (ML14090A143)
Bellefonte Nuclear Plant, Units 1 and 2	March 31, 2014 (ML14098A478)
Braidwood Station, Units 1 and 2	March 31, 2014 (ML14091A243)
Browns Ferry Nuclear Plant, Units 1, 2, and 3	March 31, 2014 (ML14098A478)
Brunswick Steam Electric Plant, Units 1 and 2	March 31, 2014 (ML14106A461)
Byron Station, Units 1 and 2	March 31, 2014 (ML14091A010)
Callaway Plant, Unit 1	March 28, 2014 (ML14090A446)
Calvert Cliffs Nuclear Power Plant, Units 1 and 2	March 31, 2014 (ML14099A196)
Catawba Nuclear Station, Units 1 and 2	March 31, 2014 (ML14099A184)
Clinton Power Station, Unit 1	March 31, 2014 (ML14091A011)
Comanche Peak Nuclear Power Plant, Units 1 and 2	March 27, 2014 (ML14099A197)
Cooper Nuclear Station	March 31, 2014 (ML14094A048)
Davis-Besse Nuclear Power Station, Unit 1	March 31, 2014 (ML14090A143)
Donald C. Cook Nuclear Plant, Units 1 and 2	March 27, 2014 (ML14092A327)
Dresden Nuclear Power Station, Units 2 and 3	March 31, 2014 (ML14091A012)
Duane Arnold Energy Center	March 28, 2014 (ML14092A331)
Joseph M. Farley Nuclear Plant, Units 1 and 2	March 31, 2014 (ML14092A020)
Fermi, Unit 2	March 31, 2014 (ML14090A326)
James A. FitzPatrick Nuclear Power Plant	March 31, 2014 (ML14090A243)
Fort Calhoun Station, Unit 1	March 31, 2014 (ML14097A087)
R.E. Ginna Nuclear Power Plant	March 31, 2014 (ML14099A196)
Grand Gulf Nuclear Station, Unit 1	March 31, 2014 (ML14090A098)
Shearon Harris Nuclear Power Plant, Unit 1	March 27, 2014 (ML14090A441)
Edwin I. Hatch Nuclear Plant, Units 1 and 2	March 31, 2014 (ML14092A017)
Hope Creek Generating Station	March 28, 2014 (ML14087A436)
Indian Point Nuclear Generating Unit Nos. 2 and 3	March 31, 2014 (ML14099A110 and ML14099A111)
LaSalle County Station, Units 1 and 2	March 31, 2014 (ML14091A013)
Limerick Generating Station, Units 1 and 2	March 31, 2014 (ML14090A236)
William B. McGuire Nuclear Station, Units 1 and 2	March 20, 2014 (ML14098A421)
Millstone Power Station, Units 2 and 3	March 31, 2014 (ML14092A417)
Monticello Nuclear Generating Plant	March 31, 2014 (ML14090A297) and April 3, 2014 (ML14093B361)
Nine Mile Point Nuclear Station, Units 1 and 2	March 31, 2014 (ML14099A196)

<b>Licensee Facility</b>	<b>Date of letter (ADAMS Accession Nos.)</b>
North Anna Power Station, Units 1 and 2	March 31, 2014 (ML14092A416)
Oconee Nuclear Station, Units 1, 2, and 3	March 31, 2014 (ML14092A024)
Oyster Creek Nuclear Generating Station	March 31, 2014 (ML14090A241)
Palisades Nuclear Plant	March 31, 2014 (ML14090A069)
Peach Bottom Atomic Power Station Units 2 and 3	March 31, 2014 (ML14090A247)
Perry Nuclear Power Plant, Unit 1	March 31, 2014 (ML14090A143)
Pilgrim Nuclear Power Station, Unit No. 1	March 31, 2014 (ML14092A023)
Point Beach Nuclear Plant, Units 1 and 2	March 31, 2014 (ML14090A275)
Prairie Island Nuclear Generating Plant, Units 1 and 2	March 27, 2014 (ML14086A628)
Quad Cities Nuclear Power Station, Units 1 and 2	March 31, 2014 (ML14090A526)
River Bend Station	March 26, 2014 (ML14091A426)
H. B Robinson Steam Electric Plant, Unit No. 2	March 31, 2014 (ML14099A204)
St. Lucie Plant, Units 1 and 2	March 31, 2014 (ML14099A106)
Salem Nuclear Generating Station, Units 1 and 2	March 31, 2014 (ML14090A043)
Seabrook, Unit 1	March 27, 2014 (ML14092A413)
Sequoyah Nuclear Plant, Units 1 and 2	March 31, 2014 (ML14098A478)
South Texas Project, Units 1 and 2	March 31, 2014 (ML14099A235)
Surry Power Station, Unit Nos. 1 and 2	March 31, 2014 (ML14092A414)
Susquehanna Steam Electric Station, Units 1 and 2	March 26, 2014 (ML14086A163)
Three Mile Island Nuclear Station, Unit 1	March 31, 2014 (ML14090A271)
Turkey Point, Units 3 and 4	March 27, 2014 (ML14106A032)
Virgil C. Summer Nuclear Station, Unit 1	March 26, 2014 (ML14092A250)
Vermont Yankee Nuclear Power Station	March 12, 2014 (ML14079A025)
Vogtle Electric Generating Plant, Units 1 and 2	March 31, 2014 (ML14092A019)
Waterford Steam Electric Station, Unit 3	March 27, 2014 (ML14086A427)
Watts Bar Nuclear Plant, Units 1 and 2	March 31, 2014 (ML14098A478)
Wolf Creek Generating Station, Unit 1	March 31, 2014 (ML14097A020)

LIST OF APPLICABLE POWER REACTOR LICENSEES AND HOLDERS OF  
CONSTRUCTION PERMITS IN ACTIVE OR DEFERRED STATUS

Arkansas Nuclear One

Entergy Operations, Inc.  
Docket Nos. 50-313 and 50-368  
License Nos. DPR-51 and NPF-6

Vice President, Operations  
Arkansas Nuclear One  
Entergy Operations, Inc.  
1448 S.R. 333  
Russellville, AR 72802

Beaver Valley Power Station

First Energy Nuclear Operating Co.  
Docket Nos. 50-334 and 50-412  
License Nos. DPR-66 and NPF-73

Mr. Eric A. Larson  
Site Vice President  
Beaver Valley Power Station  
P.O. Box 4, Route 168  
Shippingport, PA 15077

Bellefonte Nuclear Plant

Tennessee Valley Authority  
Docket Nos. 50-438 and 50-439  
Construction Permit Nos. CPPR  
No. 122 and CPPR No. 123

Mr. Michael D. Skaggs  
Senior Vice President, Nuclear Construction  
Tennessee Valley Authority  
Lookout Place 6A  
1101 Market Street  
Chattanooga, TN 37402-2801

Braidwood Station

Exelon Generation Co., LLC  
Docket Nos. STN 50-456 and STN 50-457  
License Nos. NPF-72 and NPF-77

Mr. Michael J. Pacilio  
President and Chief Nuclear Officer  
Exelon Generation Company, LLC  
4300 Winfield Road  
Warrenville, IL 60555

Browns Ferry Nuclear Plant

Tennessee Valley Authority  
Docket Nos. 50-259, 50-260 and 50-296  
License Nos. DPR-33, DPR-52 and DPR-68

Mr. Joseph W. Shea  
Vice President, Nuclear Licensing  
Tennessee Valley Authority  
1101 Market Street, LP 3D-C  
Chattanooga, TN 37402-2801

Brunswick Steam Electric Plant

Duke Energy Progress, Inc.  
Docket Nos. 50-325 and 50-324  
License Nos. DPR-71 and DPR-62

George T. Hammrick, Vice President  
Brunswick Steam Electric Plant  
P.O. Box 10429  
Southport, NC 28461

Byron Station

Exelon Generation Co., LLC  
Docket Nos. STN 50-454 and STN 50-455  
License Nos. NPF-37 and NPF-66

Mr. Michael J. Pacilio  
President and Chief Nuclear Officer  
Exelon Generation Company, LLC  
4300 Winfield Road  
Warrenville, IL 60555

Callaway Plant

Union Electric Company  
Docket No. 50-483  
License No. NPF-30

Mr. Fadi Diya  
Senior Vice President and  
Chief Nuclear Officer  
Ameren Missouri  
Callaway Plant  
P.O. Box 620  
Fulton, MO 65251

Calvert Cliffs Nuclear Power Plant

Calvert Cliffs Nuclear Power Plant, LLC  
Docket Nos. 50-317 and 50-318  
License Nos. DPR-53 and DPR-69

Mr. George H. Gellrich, Vice President  
Calvert Cliffs Nuclear Power Plant, LLC.  
Calvert Cliffs Nuclear Power Plant  
1650 Calvert Cliffs Parkway  
Lusby, MD 20657-4702

Catawba Nuclear Station

Duke Energy Carolinas, LLC  
Docket Nos. 50-413 and 50-414  
License Nos. NPF-35 and NPF-52

Mr. Kelvin Henderson  
Site Vice President  
Duke Energy Carolinas, LLC  
Catawba Nuclear Station  
4800 Concord Road  
York, SC 29745

Clinton Power Station

Exelon Generation Co., LLC  
Docket No. 50-461  
License No. NPF-62

Mr. Michael J. Pacilio  
President and Chief Nuclear Officer  
Exelon Nuclear  
4300 Winfield Road  
Warrenville, IL 60555

Comanche Peak Nuclear Power Plant

Luminant Generation Co., LLC  
Docket Nos. 50-445 and 50-446  
License Nos. NPF-87 and NPF-89

Mr. Rafael Flores  
Senior Vice President and  
Chief Nuclear Officer  
Attention: Regulatory Affairs  
Luminant Generation Company, LLC  
P.O. Box 1002  
Glen Rose, TX 76043

Cooper Nuclear Station

Nebraska Public Power District  
Docket No. 50-298  
License No. DPR-46

Mr. Oscar A. Limpias  
Vice President Nuclear and  
Chief Nuclear Officer  
Nebraska Public Power District  
72676 648A Avenue  
P.O. Box 98  
Brownville, NE 68321

Davis-Besse Nuclear Power Station

First Energy Nuclear Operating Co.  
Docket No. 50-346  
License No. NPF-3

Mr. Raymond A. Lieb  
Site Vice President  
FirstEnergy Nuclear Operating Company  
c/o Davis-Besse NPS  
5501 N. State Route 2  
Oak Harbor, OH 43449-9760

Donald C. Cook Nuclear Plant

Indiana Michigan Power Company  
Docket Nos. 50-315 and 50-316  
License Nos. DPR-58 and DPR-74

Mr. Lawrence J. Weber  
Senior Vice President and Chief  
Nuclear Officer  
Indiana Michigan Power Company  
Nuclear Generation Group  
One Cook Place  
Bridgman, MI 49106

Dresden Nuclear Power Station

Exelon Generation Company  
Docket Nos. 50-237 and 50-249  
License Nos. DPR-19 and DPR-25

Mr. Michael J. Pacilio  
President and Chief Nuclear Officer  
Exelon Nuclear  
4300 Winfield Road  
Warrenville, IL 60555

Duane Arnold Energy Center

NextEra Energy Duane Arnold, LLC  
Docket No. 50-331  
License No. DPR-49

Mr. Rich Anderson  
Site Vice President  
NextEra Energy  
Duane Arnold Energy Center  
3277 DAEC Road  
Palo, IA 52324-9785

Edwin I. Hatch Nuclear Plant

Southern Nuclear Operating Co.  
Docket Nos. 50-321 and 50-366  
License Nos. DPR-57 and NPF-5

Mr. C.R. Pierce  
Regulatory Affairs Director  
Southern Nuclear Operating Company, Inc.  
P.O. Box 1295/BIN B038  
Birmingham, AL 35201-1295

Fermi

DTE Electric Company  
Docket No. 50-341  
License No. NPF-43

Mr. Joseph H. Plona  
Senior Vice President and Chief  
Nuclear Officer  
DTE Electric Company  
Fermi 2 – 210 NOC  
6400 North Dixie Highway  
Newport, MI 48166

Fort Calhoun Station

Omaha Public Power District  
Docket No. 50-285  
License No. DPR-40

Mr. Louis Cortopassi  
Site Vice President and Chief  
Nuclear Officer  
Omaha Public Power District  
Fort Calhoun Station  
Mail Stop FC-2-4  
9610 Power Lane  
Blair, NE 68008

Grand Gulf Nuclear Station

Entergy Operations, Inc.  
Docket No. 50-416  
License No. NPF-29

Vice President, Operations  
Entergy Operations, Inc.  
Grand Gulf Nuclear Station  
P.O. Box 756  
Port Gibson, MS 39150

H. B. Robinson Steam Electric Plant

Duke Energy Progress, Inc.  
Docket No. 50-261  
License No. DPR-23

Mr. William R. Gideon, Vice President  
H.B. Robinson Steam Electric Plant  
3581 West Entrance Road  
Hartsville, SC 29550

Hope Creek Generating Station

PSEG Nuclear, LLC  
Docket No. 50-354  
License No. NPF-57

Mr. Thomas Joyce  
President and Chief Nuclear Officer  
PSEG Nuclear LLC - N09  
P.O. Box 236  
Hancocks Bridge, NJ 08038

Indian Point Energy Nuclear Generating

Entergy Nuclear Operations, Inc.  
Docket Nos. 50-247 and 50-286  
License Nos. DPR-26 and DPR-64

Vice President, Operations  
Entergy Nuclear Operations, Inc.  
Indian Point Energy Center  
450 Broadway, GSB  
P.O. Box 249  
Buchanan, NY 10511-0249

James A. FitzPatrick Nuclear Power Plant

Entergy Nuclear Operations, Inc.  
Docket No. 50-333  
License No. DPR-59

Mr. Chris Adner, Licensing Manager  
Entergy Nuclear Operations, Inc.  
James A. FitzPatrick Nuclear Power Plant  
P.O. Box 110  
Lycoming, NY 13093

Joseph M. Farley Nuclear Plant

Southern Nuclear Operating Co.  
Docket Nos. 50-348 and 50-364  
License Nos. NPF-2 and NPF-8

Mr. C.R. Pierce  
Regulatory Affairs Director  
Southern Nuclear Operating Co., Inc.  
P.O. Box 1295/Bin 038  
Birmingham, AL 35201-1295

LaSalle County Station

Exelon Generation Company  
Docket Nos. 50-373 and 50-374  
License Nos. NPF-11 and NPF-18

Mr. Michael J. Pacilio  
President and Chief Nuclear Officer  
Exelon Nuclear  
4300 Winfield Road  
Warrenville, IL 60555

Limerick Generating Station

Exelon Generation Co., LLC  
Docket Nos. 50-352 and 50-353  
License Nos. NPF-39 and NPF-85

Mr. Michael J. Pacilio  
President and Chief Nuclear Officer  
Exelon Nuclear  
4300 Winfield Road  
Warrenville, IL 60555

Millstone Nuclear Power Station

Dominion Nuclear Connecticut, Inc.  
Docket Nos. 50-336 and 50-423  
License Nos. DPR-65 and NPF-49

Mr. David A. Heacock  
President and Chief Nuclear Officer  
Dominion Nuclear Connecticut, Inc.  
Innsbrook Technical Center  
5000 Dominion Boulevard  
Glen Allen, VA 23060-6711

Monticello Nuclear Generating Plant

Northern States Power Company - Minnesota  
Docket No. 50-263  
License No. DPR-22

Mrs. Karen D. Feli  
Site Vice President  
Northern States Power Company - Minnesota  
Monticello Nuclear Generating Plant  
2807 West County Road 75  
Monticello, MN 55362-9637

Nine Mile Point Nuclear Station

Nine Mile Point Nuclear Station, LLC  
Docket No. 50-220  
License No. DPR-63

Mr. Christopher Costanzo  
Vice President Nine Mile Point  
Nine Mile Point Nuclear Station, LLC  
P. O. Box 63  
Lycoming, New York 13093

North Anna Power Station

Virginia Electric & Power Co.  
Docket Nos. 50-338 and 50-339  
License Nos. NPF-4 and NPF-7

Mr. David A. Heacock  
President and Chief Nuclear Officer  
Virginia Electric & Power Co.  
Innsbrook Technical Center  
5000 Dominion Boulevard  
Glen Allen, VA 23060-6711

Oconee Nuclear Station

Duke Energy Carolinas, LLC  
Docket Nos. 50-269, 50-270 and 50-287  
License Nos. DPR-38, DPR-47 and DPR-55

Mr. Scott Batson  
Vice President, Oconee Nuclear Station  
Duke Energy Carolinas, LLC  
7800 Rochester Highway  
Seneca, SC 29672

Oyster Creek Nuclear Generating Station

Exelon Generation Co., LLC  
Docket No. 50-219  
License No. DPR-16

Mr. Michael J. Pacilio  
President and Chief Nuclear Officer  
Exelon Nuclear  
4300 Winfield Road  
Warrenville, IL 60555

Palisades Nuclear Plant

Entergy Nuclear Operations, Inc.  
Docket No. 50-255  
License No. DPR-20

Vice President, Operations  
Entergy Nuclear Operations, Inc.  
Palisades Nuclear Plant  
27780 Blue Star Memorial Highway  
Covert, MI 49043

Peach Bottom Atomic Power Station

Exelon Generation Co, LLC  
Docket Nos. 50-277 and 50-278  
License Nos. DPR-44 and DPR-56

Mr. Michael J. Pacilio  
President and Chief Nuclear Officer  
Exelon Nuclear  
4300 Winfield Road  
Warrenville, IL 60555

Perry Nuclear Power Plant

FirstEnergy Nuclear Operating Co.  
Docket No. 50-440  
License No. NPF-58

Mr. Ernest J. Harkness  
Site Vice President - Nuclear - Perry  
FirstEnergy Nuclear Operating Company  
Perry Nuclear Power Plant  
PO Box 97, A290  
Perry, OH 44081

Pilgrim Nuclear Power Station Unit No. 1  
Entergy Nuclear Operations, Inc.  
Docket No. 50-293  
License No. DPR-35

Mr. John Dent, Jr.  
Vice President and Site Vice President  
Entergy Nuclear Operations, Inc.  
Pilgrim Nuclear Power Station  
600 Rocky Hill Road  
Plymouth, MA 02360-5508

Point Beach Nuclear Plant  
NextEra Energy Point Beach, LLC  
Docket Nos. 50-266 and 50-301  
License Nos. DPR-24 and DPR-27

Mr. Eric McCartney  
Site Vice President  
NextEra Energy Point Beach, LLC  
6610 Nuclear Road  
Two Rivers, WI 54241-9516

Prairie Island Nuclear Generating Plant  
Northern States Power Co. -Minnesota  
Docket Nos. 50-282 and 50-306  
License Nos. DPR-42 and DPR-60

Mr. Kevin K. Davison  
Site Vice President  
Northern States Power Company -  
Minnesota  
Prairie Island Nuclear Generating Plant  
1717 Wakonade Drive East  
Welch, MN 55089-9642

Quad Cities Nuclear Power Station  
Exelon Generation Company  
Docket Nos. 50-254 and 50-265  
License Nos. DPR-29 and DPR-30

Mr. Michael J. Pacilio  
President and Chief Nuclear Officer  
Exelon Nuclear  
4300 Winfield Road  
Warrenville, IL 60555

R.E. Ginna Nuclear Power Plant  
R.E. Ginna Power Plant, LLC  
Docket No. 50-244  
License No. DPR-18

Mr. Joseph E. Pacher  
Vice President  
R. E. Ginna Nuclear Power Plant  
R. E. Ginna Nuclear Power Plant, LLC  
1503 Lake Road  
Ontario, NY 14519

River Bend Station  
Entergy Operations, Inc.  
Docket No. 50-458  
License No. NPF-47

Vice President, Operations  
Entergy Operations, Inc.  
River Bend Station  
5485 U.S. Highway 61N  
St. Francisville, LA 70775

Salem Nuclear Generating Station  
PSEG Nuclear, LLC.  
Docket Nos. 50-272 & 50-311  
License Nos. DPR-70 and DPR-75

Mr. Thomas Joyce  
President and Chief Nuclear Officer  
PSEG Nuclear LLC - N09  
P.O. Box 236  
Hancocks Bridge, NJ 08038

Seabrook Nuclear Plant  
NextEra Energy Seabrook, LLC  
Docket No 50-443  
License No. NFP-86

Mr. Kevin Walsh  
Vice President, Seabrook Nuclear Plant  
c/o Mr. Michael O'Keefe  
NextEra Energy Seabrook, LLC  
P.O. Box 300  
Seabrook, NH 03874

Sequoyah Nuclear Plant

Tennessee Valley Authority  
Docket Nos. 50-327 and 50-328  
License Nos. DPR-77 and DPR-79

Mr. Joseph W. Shea  
Vice President, Nuclear Licensing  
Tennessee Valley Authority  
1101 Market Street LP 3D-C  
Chattanooga, TN 37402

Shearon Harris Nuclear Power Plant

Duke Energy Progress, Inc.  
Docket No. 50-400  
License No. NPF-63

Mr. Ernest J. Kapopoulos, Jr.  
Vice President  
Shearon Harris Nuclear Power Plant  
5413 Shearon Harris Rd  
New Hill, NC 27562-0165

South Texas Project

STP Nuclear Operating Company  
Docket Nos. 50-498 and 50-499  
License Nos. NPF-76 and NPF-80

Mr. Dennis L. Koehl  
President and CEO/CNO  
STP Nuclear Operating Company  
South Texas Project Electric Generating  
Station  
P.O. Box 289  
Wadsworth, TX 77483

St. Lucie Plant

Florida Power and Light Company  
Docket Nos. 50-335 and 50-389  
License Nos. DPR-67 and NPF-16

Mr. Mano Nazar  
Executive Vice President  
and Chief Nuclear Officer  
NextEra Energy  
P. O. Box 14000  
700 Universe Boulevard  
Juno Beach, FL 33408-0420

Surry Power Station

Virginia Electric & Power Company  
Docket Nos. 50-280 and 50-281  
License Nos. DPR-32 and DPR-37

Mr. David A. Heacock  
President and Chief Nuclear Officer,  
Dominion Nuclear  
Virginia Electric & Power Company  
5000 Dominion Blvd.  
Glen Allen, VA 23060

Susquehanna Steam Electric Station

PPL Susquehanna, LLC  
Docket Nos. 50-387 and 50-388  
License Nos. NPF-14 and NPF-22

Mr. Timothy S. Rausch  
Senior Vice President and Chief Nuclear Officer  
PPL Susquehanna, LLC  
769 Salem Boulevard  
NUCSB3  
Berwick, PA 18603-0467

Three Mile Island Nuclear Station

Exelon Generation Company, LLC.  
Docket No. 50-289  
License No.

Mr. Michael J. Pacilio  
President and Chief Nuclear Officer  
Exelon Nuclear  
4300 Winfield Road  
Warrenville, IL 60555

Turkey Point Nuclear Generating Station

Florida Power & Light Company  
Docket Nos. 50-250 & 50-251  
License Nos. DPR-031 and DPR-41

Mr. Mano Nazar  
Executive Vice President  
and Chief Nuclear Officer  
NextEra Energy  
P. O. Box 14000  
Juno Beach, FL 33408-0420

Vermont Yankee Nuclear Power Station  
Entergy Nuclear Operations  
Docket No. 50-271  
License No. DPR-28

Vice President, Operations  
Entergy Nuclear Operations, Inc.  
Vermont Yankee Nuclear Power Station  
P.O. Box 250  
Governor Hunt Road  
Vernon, VT 05354

Virgil C. Summer Nuclear Station  
South Carolina Electric & Gas Company  
Docket No. 50-395  
License No. NPF-12

Mr. Thomas D. Gatlin, Vice President  
Nuclear Operations  
South Carolina Electric & Gas Company  
Virgil C. Summer Nuclear Station  
Post Office Box 88, Mail Code 800  
Jenkinsville, SC 29065

Vogtle Electric Generating Plant  
Southern Nuclear Operating Company, Inc.  
Docket Nos. 50-424 & 50-425  
License Nos. NPF-68 and NPF-81

Mr. C. R. Pierce  
Regulatory Affairs Director  
Southern Nuclear Operating Co., Inc.  
P. O. Box 1295 / Bin 038  
Birmingham, AL 35201-1295

Waterford Steam Electric Station  
Entergy Operations, Inc.  
Docket No. 50-382  
License No. NPF-38

Vice President, Operations  
Entergy Operations, Inc.  
Waterford Steam Electric Station, Unit 3  
17265 River Road  
Killona, LA 70057-0751

Watts Bar Nuclear Plant  
Tennessee Valley Authority  
Docket Nos. 50-390 & 50-391  
License Nos. NPF-90

Mr. Joseph W. Shea  
Vice President, Nuclear Licensing  
Tennessee Valley Authority  
1101 Market Street, LP 3D-C  
Chattanooga, TN 37402-2801

William B. McGuire Nuclear Station  
Duke Energy Carolinas, LLC  
Docket Nos. 50-369 and 50-370  
License Nos. NPF-9 and NPF-17

Steven D. Capps  
Duke Energy Carolinas, LLC  
McGuire Nuclear Station  
12700 Hagers Ferry Road  
Huntersville, NC 28078-8985

Wolf Creek Generating Station  
Wolf Creek Nuclear Operating Corporation  
Docket No. 50-482  
License No. NPF-42

Mr. Adam C. Heflin  
President, Chief Executive Officer, and  
Chief Nuclear Officer  
Wolf Creek Nuclear Operating  
Corporation  
P.O. Box 411  
Burlington, KS 66839